## Library Resources and Continuing Medical Education

Two articles in this issue serve to call attention to the importance and use of library resources in medicine and particularly in the continuing education of practicing physicians. In these days of emphasis on patient care audits and practice audits, and on hours of attendance at formally accredited courses or programs in continuing medical education, it is reassuring to know that recourse to the medical literature is not only readily available, but actually thrives. Physicians, and anyone else for that matter, learn best when they feel a need or are motivated (to use the current jargon) to find out more about a particular subject. This is what occurs when physicians seek out and use library resources. Also, it is likely to be a far more efficient and effective means of getting the information that a physician needs to him when and where he needs it, than is any medical audit or any carefully structured and officially approved course in continuing medical education.

No good way has yet been found to give this sort of continuing medical education the credit it deserves in terms of public accountability for the quality of patient care. But it should be encouraged, and where possible rewarded, and both the National Library of Medicine and the Washington State Medical Association are to be commended for their accomplishments in making it both possible and actually easy for practicing physicians to make greater use of library resources.

---MSMW

## The Status of *In Vitro* Preimplantation Embryogenesis

WITH THE CURRENT ATMOSPHERE of growing concern about informed consent, human experimentation and Department of Health, Education, and Welfare regulations of fetal research, the review by Karp and Donahue of the status of in vitro preimplantation development, which appears in this issue of the JOURNAL, is timely. The state of the art is presented clearly. For a number of mammalian species in vitro oocyte maturation is possible in either serum supplemented or defined media. Human ova likewise have been matured in vitro, although they appear to be more fastidious in their culture requirements, and success rates have been notably lower. Fertilization in vitro has been accomplished for many lower mammals but has not been verified for human material. There is no case in which a Y chromosome has been shown in an early cleaving human zygote, and the criteria for claiming fertilization have been principally morphologic. Transfer of these presumptive human zygotes to a recipient uterus has never resulted in a successful implantation. Postfertilization in vitro culture of subhuman mammalian embryos is rather easily accomplished, but the only work in human embryo culture has been in conjunction with the above-mentioned fertilization attempts. In summary, in vitro oocyte maturation, fertilization, embryo culture and even transfer to a pseudopregnant uterus with subsequent birth of normal offspring has been accomplished for subhuman mammals such as mice. However, in humans only the first step of ova maturation in vitro has been unquestionably accomplished.

Why continue work along these lines? The clinical goal has been the circumvention of blocked fallopian tubes causing infertility. There are 2½ million childless couples in the United States who might be aided by such techniques. However, I believe that we should heed the suggestion of Marc Lappé, quoted by Karp and Donahue, that more animal experimentation including experience with primates is necessary be-